

WHAT IS CLAIMED IS:

1. A flexible sizer body for evaluating a valve annulus to determine a size of a prosthetic heart valve to be sewn to the valve annulus during heart valve replacement surgery, the prosthetic heart valve including an annular extension having a first flexibility and a sewing ring having a second flexibility, the flexible sizer body comprising:

an outer ring characterized by the absence of a cloth cover; and  
an annular wall coupled to and extending from the outer ring, the annular wall having a flexibility substantially similar to the first flexibility of the annular extension of the prosthetic heart valve.

2. The flexible sizer body of claim 1, wherein the annular wall defines a size and a shape substantially similar to a size and a shape of the annular extension of the prosthetic heart valve.

3. The flexible sizer body of claim 1, wherein the annular extension includes an annular housing.

4. The flexible sizer body of claim 1, wherein the annular extension includes a stent.

5. The flexible sizer body of claim 4, wherein the annular wall forms a plurality of extremities adapted to selectively deflect inwardly upon the application of an external force.

6. The flexible sizer body of claim 5, wherein the selective inward deflection characteristic of the plurality of extremities is substantially similar to a selective

inward deflection of a plurality of stent posts of the annular extension upon application of the external force.

7. The flexible sizer body of claim 4, wherein the annular wall forms a plurality of extremities permanently deflected inwardly.

8. The flexible sizer body of claim 1, wherein the outer ring has a flexibility substantially similar to the second flexibility of the sewing ring of the prosthetic heart valve.

9. The flexible sizer body of claim 1, wherein the maximum diameter of the outer ring is substantially similar to a maximum diameter of the sewing ring.

10. The flexible sizer body of claim 1, wherein the outer ring and the annular wall are each at least partially formed of an elastomeric material.

11. The flexible sizer body of claim 10, wherein the outer ring and the annular wall are each formed of at least one of the group consisting of santoprene, silicon, and polyurethane.

12. The flexible sizer body of claim 1, further comprising:  
a handle reception area to selectively receive a handle.

13. The flexible sizer body of claim 1, further comprising:  
a handle reception area adapted to permanently receive a handle.

14. The flexible sizer body of claim 1, further comprising:  
a cylinder sizer extending from the outer ring opposite the annular wall.

15. The flexible sizer body of claim 1, wherein the sizer body has a variable flexibility substantially similar to a variable flexibility of the prosthetic heart valve.

16. The flexible sizer body of claim 15, the flexible sizer body having an overall size and an overall shape substantially similar to an overall size and an overall shape of a corresponding prosthetic heart valve.

17. The flexible sizer body of claim 1, wherein the flexible sizer body is adapted to interact with the valve annulus in a manner substantially similar to how the corresponding prosthetic heart valve would interact with the valve annulus.

18. The flexible sizer body of claim 1, wherein the outer ring and the annular wall are both parabolic.

19. The flexible sizer body of claim 1, wherein the flexible sizer body is sterilizable for reuse.

20. A sizer assembly for evaluating a valve annulus to determine a size of a prosthetic heart valve to be sewn to the valve annulus during heart valve replacement surgery, the prosthetic heart valve including an annular extension having a first flexibility and a sewing ring having a second flexibility, the sizer assembly comprising:

- a handle defining a first end and a second end; and

- a flexible sizer body coupled with the first end of the handle, the flexible sizer body including:

- an outer ring characterized by the absence of a cloth cover;

- an annular wall coupled to and extending from the outer ring, the annular wall having a flexibility substantially similar to the

flexibility of the annular extension of the prosthetic heart valve.

21. The sizer assembly of claim 20, wherein the flexible sizer body further includes:

a handle reception area adapted to selectively receive the first end of the handle.

22. The sizer assembly of claim 20, further comprising:

a cylinder sizer adapted to measure a size of an opening defined by the valve annulus.

23. The sizer assembly of claim 22, wherein the cylinder sizer is coupled to and extends from the flexible sizer body opposite the handle.

24. The sizer assembly of claim 22, wherein the cylinder sizer is selectively coupled to the second end of the handle, the cylinder sizer extending from the handle opposite an extension of the flexible sizer body.

25. The sizer assembly of claim 20, wherein the outer ring has a flexibility substantially similar to the flexibility of the sewing ring of the prosthetic heart valve.

26. The sizer assembly of claim 25, wherein the flexible sizer body has a variable flexibility substantially similar to the variable flexibility of the prosthetic heart valve.

27. The sizer assembly of claim 25, wherein the annular wall forms a plurality of extremities adapted to selectively deflect inwardly upon the application of an external force.

28. The sizer assembly of claim 27, wherein the plurality of extremities are adapted to be deflected inwardly during insertion of the flexible sizer body into an opening of the valve annulus.

29. The sizer assembly of claim 25, wherein the annular wall forms a plurality of extremities permanently deflected inwardly an amount substantially similar to the amount of inward deflection of a plurality of stent posts of the annular extension upon application of an external force.

30. The sizer assembly of claim 20, wherein the flexible sizer body is sterilizable for reuse.

31. The sizer assembly of claim 20, further comprising:  
at least one representation of a leaflet of the prosthetic heart valve coupled to  
the flexible sizer body.

32. A method for evaluating a valve annulus to determine a proper size of a prosthetic heart valve to be sewn to the valve annulus during heart valve replacement surgery, the prosthetic heart valve including an annular extension having a first flexibility and a sewing ring having a second flexibility, the method comprising:

providing a flexible sizer body including:

an outer ring, and

an annular wall coupled to and extending from the outer ring, the  
annular wall having a flexibility substantially similar to the

flexibility of the annular extension of the prosthetic heart valve;

inserting the flexible sizer body into an opening of the heart valve annulus to determine whether the flexible sizer body properly fits and conforms with the heart valve annulus; and

selecting the prosthetic heart valve to be sewn in the heart valve annulus based upon the determination of whether the flexible sizer body property fit and conformed to the heart valve annulus.

33. The method of claim 32, further comprising:  
repeating the steps of inserting a flexible sizer body into an opening of the heart valve annulus for a plurality of differently configured flexible sizer bodies until one of the flexible sizer bodies is determined to fit and conform to the heart valve annulus.
34. The method of claim 33, wherein each of the differently configured flexible sizer bodies corresponds to a differently sized prosthetic heart valve.
35. The method of claim 33, wherein each of the differently configured flexible sizer bodies corresponds to a different implantation technique.
36. The method of claim 32, further comprising:  
determining whether the flexible sizer body is more suitable to interact with the heart valve annulus in an intra-annular or a supra-annular position.
37. The method of claim 36, further comprising:  
performing the heart valve replacement surgery utilizing an implantation technique selected from the group of an intra-annular technique and a

supra-annular technique, wherein the implantation technique is selected based upon the determination of which position of the flexible sizer body with respect to the heart valve annulus is more suitable for a particular patient.